

ABSTRACT

A communication terminal and a communication system for efficiently using the transmission capacity of a circuit and reducing the circuits disposed between an ATM switch and communication terminals. The communication terminal disassembles multiplexed signals obtained by multiplexing data into cells of fixed length, adds each of the cells with a header containing destination information and transmits/receives a cell through a communication line. The terminal includes a discriminator for referring to the destination information of each cell to discriminate a cell addressed to the ATM communication terminal, a multiplexed signal generator for multiplexed unit data to be transmitted from the communication terminal to generate a multiplexed signal, a cell-forming unit for forming the multiplexed signal into cells, and a cell re-multiplexed for re-multiplexing the cell generated from the multiplexed data and the cells addressed to the other communication terminal.